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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/028,644             | BELZ ET AL.         |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Nelson D. Hernandez    | 2612                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment filed February 3, 2006.
2. ☒ The allowed claim(s) is/are 6-22 and 25-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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## DETAILED ACTION

### *Response to Amendment*

1. The Examiner acknowledges the amendments made on the claims filed on February 3, 2006. Claims 6, 7, 11-13, 16, 17, 19, 21, 22, 24, 26, 27 and 29-32 have been amended. Claims 1-5, 23, 33, 34, 36-40 and 42-46 have been cancelled.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Roland Schindler (Attorney on record) on February 27, 2006.

The application has been amended as follows:

**Claim 26.** (Currently amended) A method for forming a verification image that indicates out of focus portions of an archival image using a display having a resolution that is lower than the resolution of the archival image, the method comprising the steps of:

obtaining an archival image;

generating a luminance image based upon the obtained archival image;

resampling the luminance image to form a high pass luminance image at display resolution;

generating a blur map corresponding to the resampled display resolution image by applying a threshold test to the high pass luminance image;

providing a display resolution image matching the appearance of the archival image; and

blurring the display resolution image in accordance with the blur map resolution image so that out of focus areas in the display resolution image appear to be out of focus when viewed on the display,

wherein the step of generating a luminance image comprises applying a finite impulse response high pass filter to the archival image; and

wherein the threshold is determined by applying a histogram to the display resolution high-pass luminance image and determining a threshold value that identifies a predetermined percentage of the image data as being out of focus.

**Claim 14,** (Currently amended) The method of claim 4 11 wherein the step of identifying which portions of the archival image are out of focus comprises the steps of: portioning the archival image into multiple range finding spots; obtaining a range finding distance for each spot; and using the range finding distance for each spot to identify whether the portion of the archival image associated with each spot is out of focus.

**Claim 24.** (Cancelled)

**Claim 25.** (Currently amended) The method of claim 24 26, further comprising the steps of detecting conditions including the focal length of the optical system used to capture the archival image, the depth of field of the archival optical system, and the focus distance of the archival optical system wherein the step of generating a luminance image comprises using the detected conditions to select a finite impulse high pass filter

that is adapted for such conditions and applying the selected finite impulse high pass filter to the verification image to induce blur.

**Claims 35, 41 and 47-54** have been cancelled as being drawn to a non-elected invention, the election having been made without traverse on 7/22/2005.

***Allowable Subject Matter***

**3. Claims 6-22 and 25-32 are allowed.**

**4.** The following is an examiner's statement of reasons for allowance:

**Regarding claim 11** (Renumbered as 1), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in combination with the existing elements of the present claim, using a contrast sensitivity function, based upon the distance from the viewer to the display and the imaging resolution and the size of the display, to determine the extent to which portions of the verification image must be blurred so that they appear out of focus when the verification image is displayed on the display.

**Regarding claim 21** (Renumbered as 16), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in combination with the existing elements of the present claim, detecting a digital zoom setting wherein the step of identifying out of focus portions comprise identifying portions of the archival image that will be out of focus when the archival image is enlarged to the digital zoom setting.

**Regarding claim 22** (Renumbered as 17), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in

combination with the existing elements of the present claim, detecting a digital zoom setting wherein the step of identifying out of focus portions comprise identifying portions of the archival image that will be out of focus when the archival image is enlarged to the anticipated output size.

**Regarding claim 26** (Renumbered as 18), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in combination with the existing elements of the present claim, that the threshold is determined by applying a histogram to the display resolution high-pass luminance image and determining a threshold value that identifies a predetermined percentage of the image data as being out of focus.

**Regarding claim 30** (Renumbered as 23), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in combination with the existing elements of the present claim, that the step of generating a blur map further comprises detecting a digital zoom signal and selecting a threshold based upon the digital zoom signal.

**Regarding claim 31** (Renumbered as 24), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in combination with the existing elements of the present claim, that the step of generating a blur map further comprises detecting a pseudo zoom setting and selecting a threshold based upon the pseudo zoom signal.

**Regarding claim 32** (Renumbered as 25), the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest, in combination with the existing elements of the present claim, suggest that the step of

generating a blur map further comprises detecting a setting indicating the anticipated size of the rendered output image and selecting a threshold based upon the signal.

5. **Claims 11 and 26 are generic and allowable.** Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and **claims 14, 15 and 25**, directed to different species no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, **claims 35, 41 and 47-54**, directed to a different species remain withdrawn from consideration since they do not all depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141 and have thus been canceled as indicated supra.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez  
Examiner  
Art Unit 2612

NDHH  
February 27, 2006

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal flourish extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER